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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/731,829

12/09/2003

Daniel J. Diessner

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4409

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12/02/2005

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EXAMINER

NASRI, JAVAID H

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

34

Office Action Summary	Application No.	Applicant(s)	
	10/731,829	DIESSNER ET AL.	
	Examiner	Art Unit	
	Javaid Nasri	2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 4, 6-11, 14-16, 22, 24-29, 32-34, 37, 42 and 43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 12, 13, 17-21, 23, 30, 31, 35, 36 and 38-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-3, 5, 12, 13, 17, 18, 21, 23, 30 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Doriski, Jr. (6,554,639, cited in IDS)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Doriski, Jr. discloses, **for claim 1**, a plurality of component connection receptacles (A-Z); a plurality of first conductive elements extending from each component connection receptacle (see figure 3A); a plurality of second conductive elements (see figure 3A), wherein each second conductive element extends across at least one first conductive element (see figure 3B); and a plurality of connections between said first conductive elements and said second conductive elements to provide interconnections, wherein the plurality of connections are established at those locations at which the second conductive elements extends across the first conductive elements, wherein said first and second conductive elements each comprise an insulative portion and a plurality of conductive portions (wires have insulation and conductors), **for claim 2**, the plurality of component connection receptacles comprise a plurality of connector shells and inserts (see figure 3A), **for claim 3**, each of said plurality of first conductive elements is connected at one end to an insert (see figure 3A), **for claim 5**, the plurality of connections between said first conductive elements and said second conductive elements comprise a plurality of connection vias between said first conductive elements and said second conductive elements (see figure 3A), a plurality of solder patches to connect two vias (see figure 3B) **for claims 12, 21 and 30**, the plurality of first and second conductive elements comprise a flat wire segment (see figure 3A), **for claims 13 and 31**, the plurality of first and second conductive elements comprise a printed circuit board (integrated modules are printed circuit boards), **for claim 17**, a plurality of component connection receptacles (A-Z), a plurality of first conductive elements extending from respective component connection receptacles (see figure 3A); a plurality of second conductive elements, wherein each second conductive element extends across at least one first conductive element (see figure 3B-D, 4A), and a plurality of connections between said first

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conductive elements and said second conductive elements to provide interconnections, wherein the plurality of connections are established at those locations at which the second conductive elements extends across the first conductive elements, a first backplane (ID21) comprising at least third and fourth conductive elements to provide interconnections; a second backplane (ID17) comprising at least fifth and sixth conductive elements to provide interconnections among the plurality of components associated with said first backplane; and a plurality of connection elements between said first and second backplanes, wherein the conductive elements comprise an insulative portion and a plurality of conductive portions, **for claim 18**, the plurality of connection elements comprise single wire, **for claim 23**, wherein at least one of the plurality of connections between said first conductive elements and said second conductive elements, the first backplane and the second backplane comprises a plurality of connection vias between at least one of the respective first and second conductive elements and third, fourth, fifth and sixth conductive elements and a plurality of solder patches, wherein each solder patch connects at least two of the connection vias (see figure 3D).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 19, 20, 35, 36 and 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doriski, Jr.

Doriski, Jr. discloses all the limitations of claim 17, as shown above,

However, Doriski, Jr. does not disclose:

- a) The plurality of connection elements comprises coaxial cables/twisted pair wires. Official notice is taken that use of coaxial cables/twisted pair wires is well known in the art; therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention for Doriski, Jr to use coaxial cables/twisted pair wires to reduce the interference.
- b) For claims 35, 36 and 38, Doriski, Jr discloses all the structural limitations of claims as shown above, however, Doriski, Jr does not describe the method as claimed. The claimed method language is counter part of the apparatus claimed. Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to develop a particular method for the disclosed apparatus of the cited references.

Response to Arguments

5. Applicant's arguments filed on 10/4/2005 have been fully considered but they are not persuasive.

Regarding applicant's comment:

- a) These splices do provide connection between conductors, but not conductors that extends across one another. It should be noted that for example the splice (SP1) do provide connection of conductors that extends across one another (see marked figure 3A, attached). See note below.

Note: USPTO interprets claims, giving claims their "broadest reasonable interpretation."

(see, e.g., *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997)).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

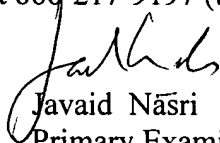
Contact

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javaid Nasri whose telephone number is 571 272 2095. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C. Patel can be reached on 571 272 2800 ext 39. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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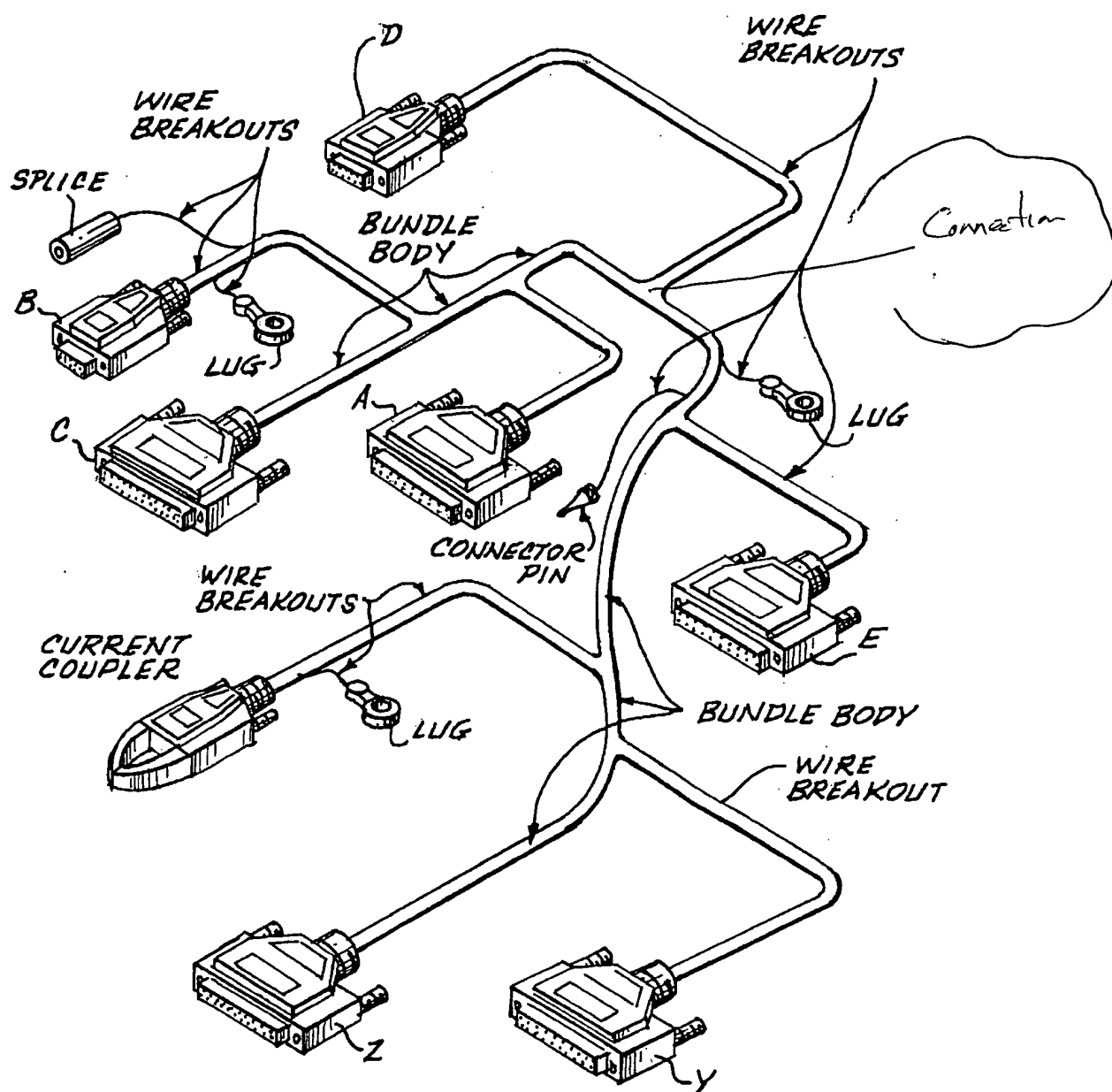
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Javaid Nāsri
Primary Examiner
Art Unit 2839

JN

Jhn

November 29, 2005

*Fig. 3A.*